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TESTING LABORATORY

Husova 121
281 26 Týnec nad Labem

Test report no.: K-K-25-11740

Number of pages:	8
Order No.:	K-K-25-11740
Contracting authority:	ALPHA CZECH s.r.o. Mr. Pyšný U plynárny 348/83 CZ 10100 Prague 10 - Michle
Laboratory – location testing:	GRADUS, a.s.
Address:	Husova 121 CZ 281 26 Týnec nad Labem
Protocol prepared by:	Ing. Marek Schiller
Subject of testing:	**Your order e-mail dated 23.05.25 based on our price quote no. 4123 dated 13.05.25 Part*: Abamal anti-mold 4 pcs**

Test name: Determination of resistance under UV lamps

Test according to: AZP-13 (ČSN EN ISO 4892-3)

Test name: Determination of mirror gloss of coatings

Test according to: ČSN ISO 2813

Test name: Colorimetric determination of color differences

Test according to: AZP-11 (ČSN EN ISO/CIE 11664-4)

Base material*:	fiber cement board
Coating characteristics*:	roller coating
Sampling method:	samples taken by the client, testing concerns samples supplied by the customer, samples were tested as received
Sample preparation:	stored under laboratory conditions
Coating thickness (DFT):	according to ČSN EN ISO 2808 – method 4B – determination by depth measurement – type 2 dial gauge (non-accredited test procedure)
Testing equipment:	QUV/SPRAY/RP chamber – Q-lab corporation, USA,
Test lamps used:	fluorescent UV lamps type 1A – UVA 340
Test cycle:	method A test cycle 1 8 hours of exposure at a temperature of (60 ± 3) °C, radiation intensity

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	0.76 Wm^{-2} x nm^{-1}
	4 hours of condensation without exposure at a temperature of (50 ±
3) °C Test equipment:	BYK micro tri gloss gloss meter, Byk – Gardner GmbH Test
equipment:	BYK-mac i23 colorimeter, Byk Gardner GmbH Measurement
conditions:	D65/10° illumination, without included gloss

Date of sample collection: May 23
Test date: 09 06.25 – 31.08.25

Test results

Determination of dry film thickness

Sample of sample	Sample Sample	ø DFT	Minimum value	Maximum value	Expanded uncertainty U
11740-1	-	**776**	750	790	-
11740-2	-	**778**	770	785	-
11740-3	-	**782**	770	810	-
11740-4	-	**787**	770	805	-

Measured thickness values for individual samples

11740-1	790	750	770	790	780	780	770	775	780	775
11740-2	780	785	780	775	775	780	785	775	770	775
11740-3	810	790	775	780	780	775	780	770	785	775
11740-4	805	795	790	780	775	785	790	770	790	790

Coating gloss measurement

Sample	Gloss before exposure [GU]		
	20	60	85
11740-1	1.3	2.1	0.2
11740-2	1.3	2.1	0.3
11740-3	1.3	2.1	0.3
11740-4	1.3	2.1	0.2

Sample	Gloss after 500 h exposure according to ČSN EN ISO 4892-3 [GU]		
	20	60	85
11740-3	1.3	2.1	0.3
11740-4	1.3	2.1	0.2

Sample	Gloss after 1000 h exposure according to ČSN EN ISO 4892-3 [GU]		
	20	60	85
11740-3	1.3	2.1	0.3
11740-4	1.3	2.1	0.2

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Sample	Gloss after 1500 hours of exposure according to ČSN EN ISO 4892-3 [GU]		
	20	60	85
11740-3	1.3	2.0	0.3
11740-4	1.3	2.1	0.2

Sample	Gloss after 2000 hours of exposure according to ČSN EN ISO 4892-3 [GU]		
	20	60°	85°
11740-3	1.3	2.0	0.3
11740-4	1.3	2.0	0.2

Color coordinate measurement

Sample	Color coordinates			Color Deviation
	L	a	b	ΔE
11740	96.43	-0.51	2.38	-

Sample	Deviations in color coordinates after 500 hours of exposure according to ČSN EN ISO 4892-3			Color deviation
	ΔL	Δa	Δb	ΔE
11740-3	-0.45	0.05	-0.23	**0.51**
11740-4	-0.49	0.04	-0.18	**0.53**

Sample	Deviations in color coordinates after 1000 hours of exposure according to ČSN EN ISO 4892-3			Color deviation
	ΔL	Δa	Δb	ΔE
11740-3	-0.47	0.03	-0.28	**0.55**
11740-4	-0.56	0.03	-0.28	**0.63**

Sample	Deviations in color coordinates after 1500 hours of exposure according to ČSN EN ISO 4892-3			Color deviation
	ΔL	Δa	Δb	ΔE
11740-3	-0.75	0.03	-0.46	**0.87**
11740-4	-0.70	0.03	-0.45	**0.84**

Sample	Deviations in color coordinates after 2000 hours of exposure according to ČSN EN ISO 4892-3			Color deviation
	ΔL	Δa	Δb	ΔE
11740-3	-0.88	0.03	-0.52	**1.02**
11740-4	-0.97	0.04	-0.55	**1.11**

Photos of samples No. 3, 4 500 hours of exposure under UV lamps

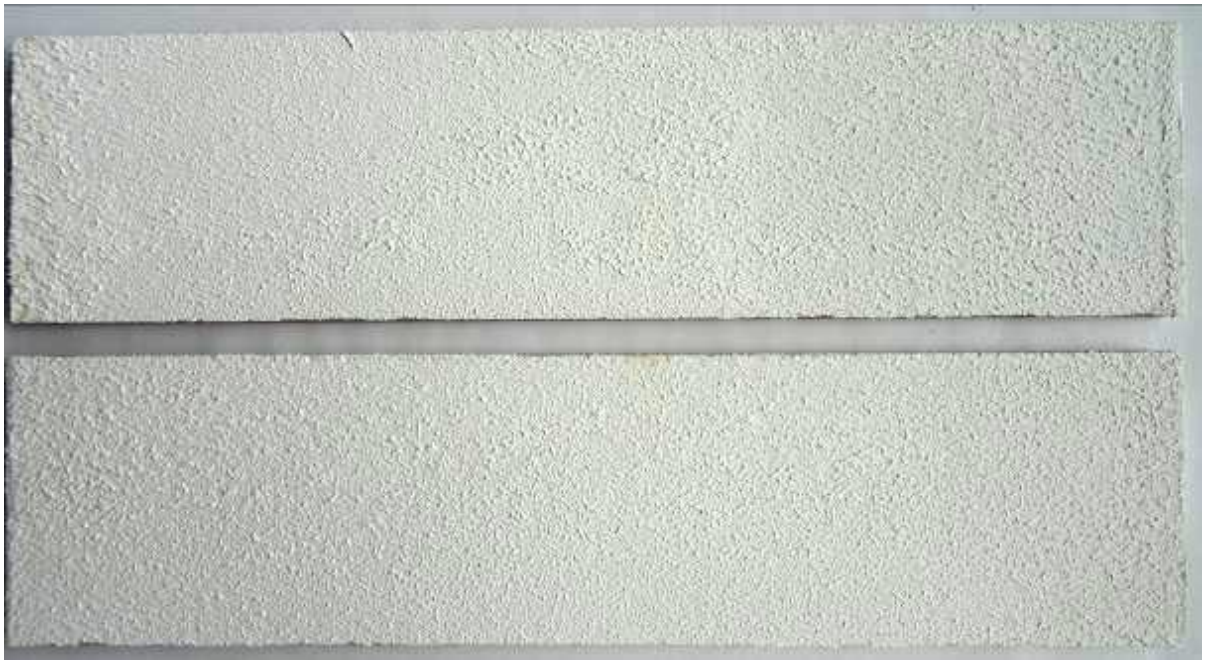

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Photo of samples no. 3, 4 **1000 hours of exposure under UV lamps**

Photos of samples No. 3, 4 **exposure for 1500 hours under UV lamps**

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Photo of samples no. 3, 4 **2000 hours of exposure under UV lamps**

Nametests:	**Tear test – Adhesion test** **Surface treatments of building structures for the substrate**
Test according to:	ČSN 73 2577
Testing equipment:	AMB 10 pull-off device, Roklan electronic, Czech Republic Test
conditions:	The test was performed in a laboratory at (23 ± 2)°C and (50 ± 5) % humidity
Reference test:	samples in the delivered state were conditioned conditioned for more than 24 hours under laboratory conditions
Samples after exposure:	Samples after testing according to ČSN EN ISO 4892-3 exposure 2000 hours, stored in laboratory conditions for 168 hours prior to tear test
Test specimens:	aluminum test specimens with a diameter of 50 mm
Adhesive used:	Bison two-component epoxy adhesive Adhesive drying
time:	24 hours at laboratory temperature
Cutting of test	with a core drill with a diameter of 56 mm

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Unusual phenomena and anomalies: Test results

No phenomena or anomalies occurred during the test

Tear test – reference test samples without exposure, only conditioned under laboratory conditions.
Samples 11740-1, 11740-2

Tear strength [MPa]	1.	2.	3.	4.	5.	6.	Average
	0.49	0.52	0.48	0.55	0.56	0.56	**0.53 ± 0.04**
Character of the quarry	A	A	A	A	A	A	-

Tear test – test after 2000 hours of exposure Test according to ČSN EN ISO 4892-3 Samples 11740-3, 11740-4

Tear strength [MPa]	1.	2.	3.	4.	5.	6.	Average
	0.44	0.45	0.41	0.44	0.55	0.48	**0.46 ± 0.05**
Refractive index	A	A	A	A	A	A	-

Photo of parts no. 1, 2 after tear test - without exposure

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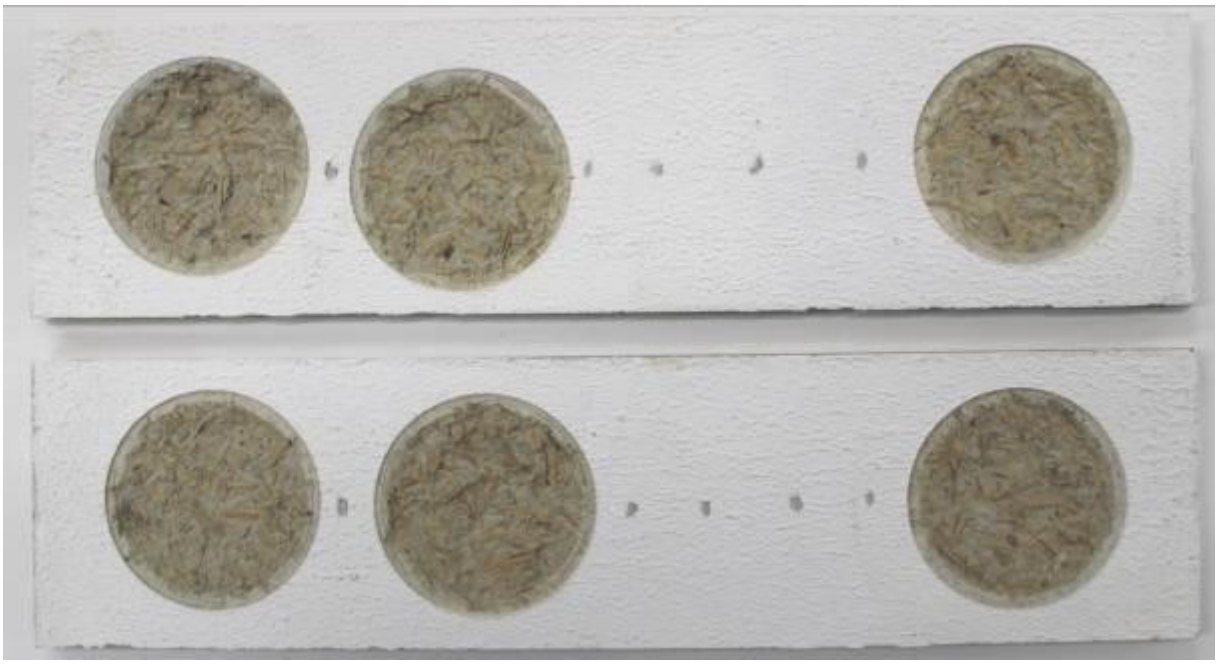
Photo of parts no. 3, 4 after tear test – exposure 2000 h under UV lamps



*Information provided by the customer.

Date of report issue: 03.11.25
Approved by: Ing. Martin Kaška, Ph.D., Head of Laboratory